MOB II WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	MARGINAL
FLUID CONDITION	ABNORMAL

Machine Id
FREIGHTLINER 2461
Component
Diesel Engine
Fluid
PETRO CANADA DURON HP 15W40 (--- QTS)

RECOMMENDATION

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

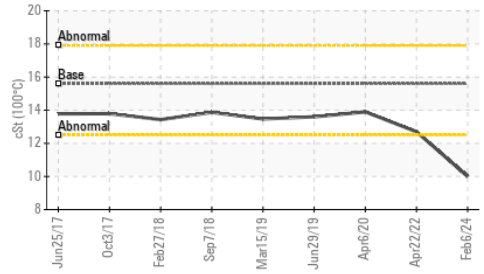
Light fuel dilution occurring.

FLUID CONDITION

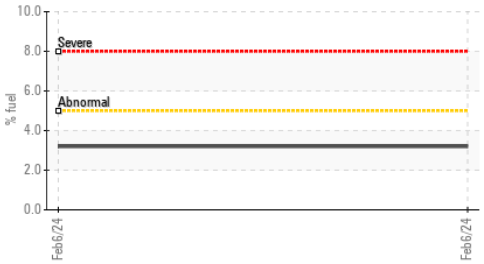
The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		RW0004933	RW0003129	RW0000872
Sample Date		Client Info		06 Feb 2024	22 Apr 2022	06 Apr 2020
Machine Age	hrs	Client Info		9162	8555	6059
Oil Age	hrs	Client Info		160	800	160
Filter Age	hrs	Client Info		160	800	160
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>80	21	31	6
Chromium	ppm	ASTM D5185m	>5	2	2	<1
Nickel	ppm	ASTM D5185m	>2	<1	<1	<1
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m	>3	0	<1	0
Aluminum	ppm	ASTM D5185m	>30	6	7	2
Lead	ppm	ASTM D5185m	>30	0	<1	<1
Copper	ppm	ASTM D5185m	>150	4	<1	<1
Tin	ppm	ASTM D5185m	>5	<1	<1	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>20	4	4	4
Potassium	ppm	ASTM D5185m	>20	6	11	10
Fuel	%	ASTM D3524	>5	▲ 3.2	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.3	0.7	0.2
Nitration	Abs/cm	*ASTM D7624	>20	7.9	14.1	7.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.6	25.7	20.7
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
Sodium	ppm	ASTM D5185m		1	3	2
Boron	ppm	ASTM D5185m		8	12	141
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		52	60	5
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		833	925	74
Calcium	ppm	ASTM D5185m		940	1163	1830
Phosphorus	ppm	ASTM D5185m		900	1018	810
Zinc	ppm	ASTM D5185m		1124	1218	921
Sulfur	ppm	ASTM D5185m		2736	2563	3816
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.2	24.9	17
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	10.13	5.85	8.31
Visc @ 100°C	cSt	ASTM D445	15.6	▲ 10.0	12.7	13.9

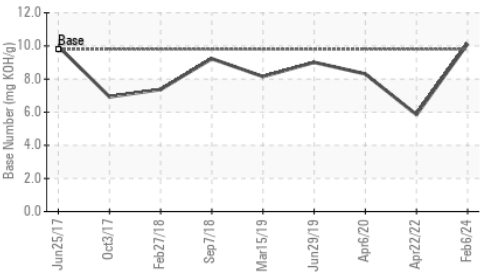
Viscosity @ 100°C



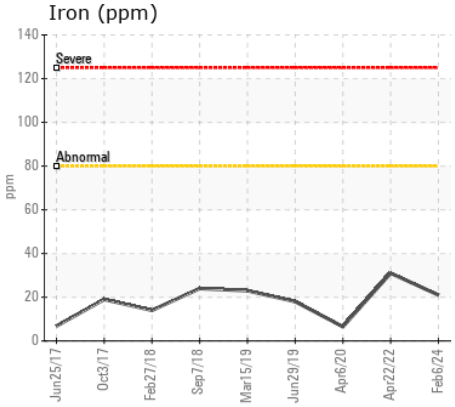
Fuel Dilution



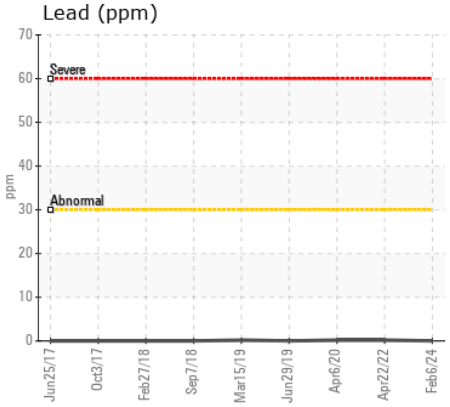
Base Number



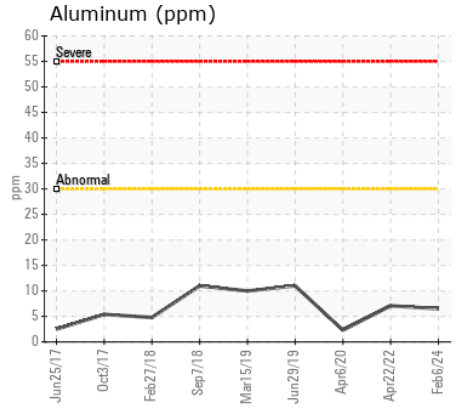
Iron (ppm)



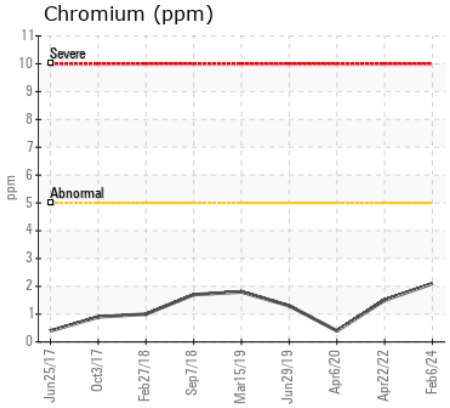
Lead (ppm)



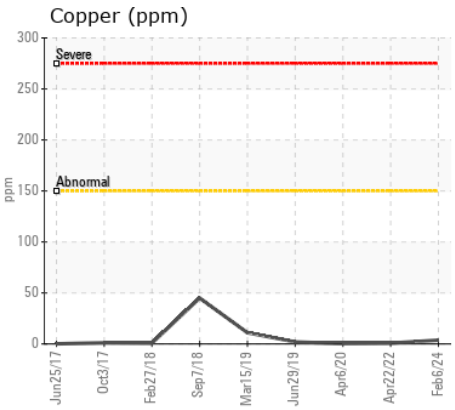
Aluminum (ppm)



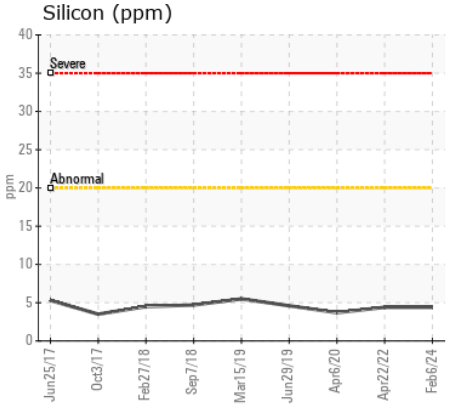
Chromium (ppm)



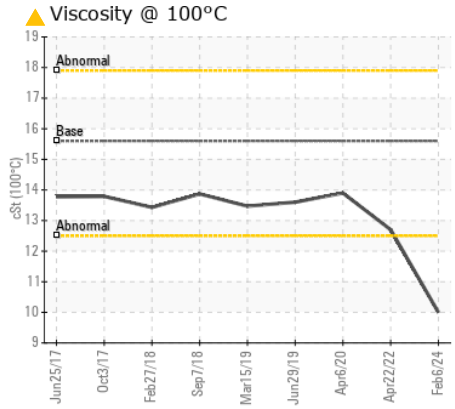
Copper (ppm)



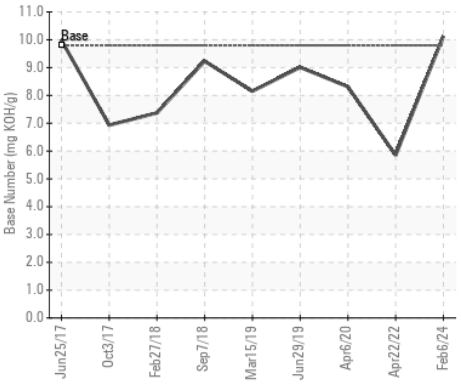
Silicon (ppm)



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RW0004933 **Received** : 23 Feb 2024
Lab Number : 06098640 **Tested** : 27 Feb 2024
Unique Number : 10896870 **Diagnosed** : 27 Feb 2024 - Wes Davis
Test Package : MOB 2 (Additional Tests: FuelDilution, PercentFuel)

To discuss this sample report, contact Customer Service at 1-800-237-1369.
** - Denotes test methods that are outside of the ISO 17025 scope of accreditation.*
Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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